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COMPLETE SPECIFICATION 1099582

This drawing is a reproduction of the Original on a reduced scale Sheets 1 & 2 2 SHEETS

0 20 Flig 3 13 60 Fig.5. Fig.4. 80, 0 0 Flig. 2 13 14 -50 0 0  $\bar{b}\bar{b}$  $\bar{pg}$   $\bar{p}$ ø

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### PATENT SPECIFICATION

DRAWINGS ATTACHED

1,099,582

1.099,582

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GT. BRIT. DIV.

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### COMPLETE SPECIFICATION

### Improvements in or relating to Readily Erected Articles of Furniture having a Drawer or Drawers

I, HARRY KRANTZ, a British subject, of 11—15, Lillie Road, Fulham, London, S.W. 6, do hereby declare the invention, for which I pray that a Patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to readily erected articles of furniture having a drawer or drawers, the term "readily erected" as used herein denoting an article having a collapsible carcase built up from a set of component parts by interfitting said parts, or securing them together by located removable fixing means, thus enabling the parts to be supplied as a set which can be fitted together by the purchaser. An object of the invention is to provide an article having the above characteristics wherein a rectangular frame for connecting opposite side wall panels includes a part (or parts) serving also to afford guidance for a drawer supported by it, that is to say guidance during normal use of said drawer.

The invention concerns a readily erected article of furniture as above defined which includes, in addition to the collapsible carcase, a drawer or drawers, and according to the invention there is provided, for the one or each drawer, a horizontal rectangular drawer support frame having drawer guiding runners, said frame being detachably engaged with and connecting side wall panels of the carcase at a position intermediately in the height of said carcase.

The one or each drawer support frame is essentially a unit which can be handled as such when assembling the parts of the article.

Conveniently the carcase may comprise side wall panels, a rear wall panel engageable with said side wall panels, upper connection means for connecting upper portions of said side wall panels, and the rectangular drawer support frame for the one or each drawer,

said drawer support frame and said side wall panels having interengageable means for holding these parts assembled, with the said drawer support frame spaced below the upper connecting means or spaced below the drawer support frame next above, as the case may be. Preferably each drawer support frame comprises front and rear rails connected by runners overlying said front and rear rails, each of said runners being rebated or of L section for cooperation with a side and base of the drawer.

A chest of drawers of convenient form in accordance with the invention will now be described and is shown in the accompanying drawings, wherein—

Figure 1 is a perspective view showing the component parts of the article separated,

Figure 2 is a front elevation of the builtup article,

Figure 3 is a front perspective view of one of the drawers,

Figure 4 is a perspective view showing the folding action of each drawer,

Figure 5 is a plan view of a folded drawer, and

Figure 6 is a fragmentary sectional view of an erected drawer wall, showing a channel strip engaged over the top of said wall to prevent the folding of such wall.

The chest of drawers shown has a carcase comprising side wall panels 1, a rear panel 2, top panel 3, base panel 4 and a set of parts which connect the side wall panels 1, these connecting parts comprising upper bars 5 and rectangular drawer support frames 6. The panels 1 and 3 each comprise a rectangular wooden frame 7 to one face of which is attached a piece of sheet material 8 (for instance, hardboard) having sufficient rigidity to maintain a substantially flat form. Preferably the face of said sheet material which is away from frame 7 is covered with a flex-

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[Price 4s. 6d.]

ible facing skin lapped over said frame 7, this facing skin giving a desired finished appearance. The rear panel 2 is simply a piece of material (e.g. hardboard) having sufficient rigidity to maintain a substantially flat form; this panel 2 also may be covered (at least on one face and over the edges) with a facing skin.

Each of the drawer support frames 6 comprises wooden front and rear rails 6a rigidly and permanently connected by wooden runners 6b which overlie said front and rear rails, these runners 6b being rebated or of L section, and each arranged with the re-entrant angle or rebate disposed inwardly for reception of the adjacent bottom corner of an associated drawer. On each end of each rail 6a there is a projecting dowel 9 engageable as a friction push fit into an associated hole 10 in one of the side wall panel frames 7. The upper bars 5 are likewise formed with dowels 9a at their ends, said dowels frictionally engaging into the uppermost set of the holes 10.

By assembling the parts 1, 5 and 6, involving engagement of the dowels 9 and 9a into the associated holes 10, the side wall panels 1 are held in the required spaced relationship in vertical positions. The upper drawer support frame 6 is at the required position spaced below the upper bars 5, the other frames 6 being spaced below one another, each of the spaces thus formed serving to receive a drawer hereinafter referred to.

The rear portions of the side wall panel frames 7 are grooved on their opposed inner faces, the grooves 11 serving to receive side edge portions of the rear panel 2, thus allowing said panel 2 to be slid down into position. The top panel 3 is secured in place upon the side wall panels and upper bars 5 by screws passed up through holes 12 in the upper bars under the side frames and screwing into the frame of said top panel 3. Said top panel closes the top of the space between the side wall panels 1.

The sheet material 8 of cach side wall panel 1 extends below the frame 7 of said panel, the extension portions 8a serving in conjunction with the rails 6a of the lowermost drawer support frame 6 to form a recess which houses the base panel 4. Said panel 4 is secured by screws passed up through it and screwing into the lower portions of frames 7 of the side wall panels 1. Leg attachment fittings 13 (Figure 2) on the underside of base panel 4 near the four corners thereof serve to hold legs 14 which support the carcase from floor level.

Drawers mounted on the respective drawer support frames 6 are foldable for collapse so that said drawers can be compactly packaged with the carcase forming parts of the article for transit. Each drawer comprises a front wall 15, rear wall 16, side walls 17, and base 18. The side walls 17 are formed with

fold-defining lines 19, and the base 18 is connected to said side walls by fold-defining lines 20.

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The side walls 17, rear wall 16 and base 18 form a box-like body made of stout cardboard or other sheet material which can be deformed to produce such fold-defining lines. The front wall 15 comprises a substantially rigid panel 15a (for instance made of hardboard) which is bonded to a front check 15b of the box-like body. The panel 15a is of greater depth and length than the remainder of the drawer, and is so disposed that upper and lower and end portions thereof project beyond the adjacent edges of the cheek 15b. This affords overlap over the adjacent parts of the carcase to conceal the drawer-receiving spaces when the drawers are closed. By felding the drawer side walls on themselves (about the fold lines 19) said side walls turn down in the outward direction by hinging about the fold lines 20. This has the effect of swinging down the front wall 15 and rear wall 16 so that these parts eventually fold down on to the base 18, the entire drawer structure then being substantially flat.

To maintain each drawer in its crect position, channel strips 21 are engaged over the upper edge portions of the respective side walls 17, the strip being disposed with its 95 channel facing downwardly. Each strip 21 extends substantially the length of the wall 17, and thereafter keeps said wall rectilinear to prevent the folding. The channel strip 21 may be extruded in synthetic plastics material, and 100 is a friction fit on the wall 17. The strip has the further advantage of enhancing the appearance at the top of the drawer.

It will be understood that each erected drawer travels on the two runners 6b of the 105 associated drawer support frame 6. Each of the said runners, being of rebated form or L section, co-operates with the adjacent side and base of the drawer, the said runners thus serving as guideways for correct disposition 110 of the drawer during travel.

The invention will afford great convenience in the compact packaging of all the parts necessary for the construction of an article of furniture including a drawer or drawers. The parts can be readily assembled and erected by the purchaser.

#### WHAT I CLAIM IS:-

1. A readily erected article of furniture as herein defined, including, in addition to the collapsible carcase, a drawer or drawers, wherein there is provided, for the one or each drawer, a horizontal rectangular drawer support frame having drawer guiding runners, said frame being detachably engaged with and connecting side wall panels of the carcase at a position intermediately in the height of said carcase.

2. A readily erected article of furniture as

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herein defined including, in addition to the collapsible carcase, a drawer or drawers, the said carcase comprising side wall panels, a rear wall panel engageable with said side wall panels, upper connection means for connecting upper portions of said side wall panels, and a horizontal rectangular drawer support frame for the one or each drawer, said drawer support frame and said side wall panels having interengageable means for holding these parts assembled, with the drawer support frame spaced below the upper connecting means or spaced below the drawer support frame next above as the case may be, the one or each drawer support frame having drawer guiding runners.

3. An article of furniture according to Claim 1 or 2, wherein each drawer support frame comprises parallel front and rear rails connected by runners overlying said front and rear rails, each of said runners being rebater or of L section for co-operation with a side and base of the drawer.

4. An article of furniture according to Claim 1, 2 or 3, wherein the one or each drawer support frame has dowels engageable in holes formed in the side wall panels.

 An article of furniture according to Claim 2, wherein the side wall panels are longitudinally grooved for receiving side edge portions of the rear wall panel to enable said rear wall panel to be slid down vertically into position.

6. An article of furniture according to Claim 1 or 2, wherein the one or each drawer includes front and rear walls arranged to fold down on to the base of the drawer, and includes also side walls each foldable on itself to allow such folding down of the front and

rear walls, releasable means being provided to maintain the side walls rectilinear.

7. An article of furniture according to Claim 6, wherein the means for maintaining each draw side wall rectilinear comprises a channel strip detachably engaged over the 45 top of said wall.

8. A chest of drawers according to any of the preceding claims having the drawer support frames in spaced relationship one above the other, the drawers being mounted upon said frames, the upper connection means comprising the bars detachably engageable with the side wall panels (e.g., by dowels), a top panel being fitted above said cross bars for closing the space between the side walls.

9. An article of furniture according to Claim 2, wherein each side wall panel comprises a framework and a piece of substantially rigid sheet material permanently secured to the outer face of said framework.

10. An article of furniture according to Claim 9, wherein said piece of sheet material extends below a bottom member of said framework, and a base panel is accommodated in a space bounded by said extensions of the said pieces of sheet material and by the front and rear rails of the adacent drawer support frame.

11. A readily erected article of furniture substantialy as herein described, and as shown in the accompanying drawings.

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